

Curriculum Vitae

Thomas Ried

Date of birth: Dec. 14, 1960

Place of birth: Karlsruhe, Germany

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National Cancer Institute
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EDUCATION

M.D., University of Heidelberg, 1989

THESIS

Max Planck Institute for Medical Research, Heidelberg, Department of Molecular Biology (Dr. Hans-Peter Vosberg)

“Cloning and characterization of the human β -myosin heavy chain gene”

HABILITATION

Habilitation for Human Genetics, University of Heidelberg, Feb. 9, 1995

“Fluorescence in situ hybridization in genetic diagnostics”

RESEARCH EXPERIENCE

1989-1990: Institute of Human Genetics, University of Heidelberg, Section of Molecular Human Genetics (Dr. Friedrich Vogel).

1990-1993: Postdoctoral Fellowship from the Deutsche Forschungsgemeinschaft:

May 1990-August 1990: Department of Cytochemistry and Cytometry, Sylvius Laboratories, University of Leiden, The Netherlands (Dr. Anton K. Raap, Dr. Mels van der Ploeg).

September 1990-July 1992: Department of Genetics, Yale University School of Medicine, New Haven, Connecticut, USA (Dr. David C. Ward).

August 1992-May 1994: Department of Human Genetics, University of Heidelberg, Germany (Dr. Thomas Cremer).

PROFESSIONAL APPOINTMENTS

June 1994-October 1998: Head, Unit of Fluorescence in situ Hybridization Techniques, Diagnostic Development Branch/National Human Genome Research Institutes/National Institutes of Health, Bethesda, Maryland.

March 1995: Tenure track appointment at the NIH.

June 1996-October 1998: Director, Cytogenetic Core, National Human Genome Research Institute.

Since January 1998: Co-Director (with Dr. Ilan R. Kirsch), Cancer Chromosome Aberration Project (C-cap), National Cancer Institute/NIH (Development of a clone repository and cancer chromosome aberration database).

November 1998: Investigator, Genetics Department, Division of Clinical Sciences, National Cancer Institute

February 7, 2000: Tenure at the National Institutes of Health

AWARDS

May 1996: NCHGR-Interdisciplinary Research Award (Shared with Drs. Lawrence Brody and Anthony Wynshaw-Boris, National Center for Human Genome Research): Creation and Analysis of a Mouse Deficient for the Breast and Ovarian Cancer Susceptibility gene BRCA1.

November 2000: American Society of Biochemistry and Molecular Biology ASBMB-Amgen Award.

COOPERATIVE RESEARCH & DEVELOPMENT AGREEMENTS (CRADA)

Development of a fully automated karyotyping system based on co-hybridization of Cy5-labeled chromosome specific repeat probes. (Applied Imaging, Inc.).

Development of an integrated microscope system for automated digital image acquisition for FISH-applications. (Leica Imaging, Ltd.).

Development of a hybridization based multicolor karyotype of the human chromosome complement using spectral bio-imaging. (Applied Spectral Imaging, Ltd.).

Development of fluorescent probe sets for interphase diagnostics of human cancers (Vysis, Inc.)

MEMBERSHIP

German Society of Human Genetics
American Society of Human Genetics
American Association for Cancer Research
American Association for the Advancement of Science
European Cytogeneticists Association
Faculty of 1000

REVIEWER

Journals:

- American Journal of Pathology
- BioTechniques
- Breast Cancer Research and Treatment
- British Journal of Cancer
- Cancer
- Cancer Genetics & Cytogenetics
- Cancer Letters
- Cancer Research
- Carcinogenesis
- Cellular Oncology
- Clinical Cancer Research
- Cytogenetics and Cell Genetics
- Chromosome Research

- Genes, Chromosomes & Cancer
- Genes & Development
- Genome Research
- Genomics
- Hepatology
- Human Genetics
- Human Molecular Genetics
- International Journal of Cancer
- Journal of Histochemistry and Cytochemistry
- Journal of the National Cancer Institute
- Molecular Cancer
- Nature Biotechnology
- Nature Genetics
- Oncology
- Proceedings of the National Academy of Sciences USA
- Science
- The New England Journal of Medicine
- Trends in Genetics

Research Institutions (national):

- American Society of Hematology
- Imaging Sciences Working Group, National Cancer Institute, NIH
- Special Emphasis Panel, Minority Biomedical Research Support, National Institutes of General Medical Sciences/NIH
- Source Evaluation Group, National Cancer Institute/DCPC/NIH
- Early Cancer Detection Workshop, National Cancer Institute, DCPC/NIH
- Novel Technologies for Evaluation of Molecular Alterations in Tissue, National Cancer Institute, NIH
- Chromosome Aberration Workshop, National Cancer Institute, NIH
- Leukemia, Lymphoma and Myeloma Progress Review Group, NCI
- Mammalian Genome Study Section, NIH
- Research Technology Program Advisory Committee, NCI

Research Institutions (international):

- Wellcome Research Trust, UK
- Association for International Cancer Research, UK
- The Neuro-Oncology Foundation of Canada
- Dutch Cancer Society
- Cancer Research Campaign, UK
- St. Bartholomew's Hospital, London, UK
- Fonds zur Förderung der wissenschaftlichen Forschung (FWF), Vienna, Austria
- Swiss National Science Foundation, Bern, Switzerland

- Research Grants Council of Hong Kong
- Innovation Oriented Research Programme on Genomics, Den Haag, The Netherlands
- The Israel Science Foundation, Jerusalem, Israel
- German National Genome Research Network, Bonn, Germany
- Union Internationale Contre le Cancer, Lyon, France

EDITORIAL BOARDS

- Chromosome Research (1995-1999)
- Genes, Chromosomes & Cancer (since 1998)
- Human Genetics (since 1998)
- Cancer Genetics & Cytogenetics (since 1998)
- Technology in Cancer Research & Treatment (since 2002)
- Cancer Genomics & Proteomics (since 2003)

EDITOR

- Analytical and Cellular Pathology (since 1999)

SCIENTIFIC ADVISORY BOARDS

Applied Spectral Imaging, Ltd., Migdal HaEmek, Israel (1996-1998)

Cancer Genetics Inc., Cambridge, MA, USA

Avalon, Inc., Germantown, MD, USA

PATENTS & EMPLOYEE INVENTION REPORTS

“Methods of diagnosis of colorectal cancer, compositions and methods of screening for modulators of colorectal cancer” (US-patent # 20040063108; February 15, 2005)

“Delineation of individual human chromosomes in metaphase and interphase cells by in situ suppression hybridization” (US-patent appl. 08/312,429, notice of allowance).

“Filtertest for the detection of numerical chromosomal aberrations in testgenomes” (Patent # 43 33 726, Germany). Filed internationally as: “Arrangements of nucleic acids and their use”.

“Method for the detection of cervical cancer”(US-patent # 5,919,624; July 6, 1999).

“Method for simultaneous detection of multiple fluorophores for in situ hybridization and multicolor chromosome painting and banding” (US-patent # 6,066,459, May 23, 2000).

“Simultaneous multicolor visualization of chromogenic dyes using brightfield microscopy and spectral imaging” (US-patent application no. 09/130,078, notice of allowance).

“Method for detecting cancer cells” (US-patent application no. 60,127,367).

“Amplification or overexpression of MLL septin like fusion (MSF) and septin9 and methods related thereto” (US-patent application no. 60/448,700).

"Gene Expression Profiling Predicts the Response of Rectal Carcinomas to Radiochemotherapy" E-269-2003/0-EIR-00.

MENTOR

Predoctoral fellows:

Kelly Just
Tim Veldman
Anthony Schaeffer
Kathy Dorritie
Viktor Janz

Present affiliation:

Georgetown University Medical School
Georgetown University Graduate School
University of Chicago Medical School
New York State Medical School
University of Leipzig Medical School

Thesis advisor:

Kerstin Heselmeyer
Regina Knutzen
Michael Bujard
Kathrin Sommerfeld
Jens Habermann

Karolinska Institute, Stockholm, Sweden
University of Lübeck, Germany
University of Heidelberg, Germany
University of Freiburg, Germany
Karolinska Institute, Stockholm, Sweden

Postdoctoral fellows:

Amalia Dutra, Ph.D
Marek Liyanage, Ph.D
Merryn Macville, Ph.D

Stan du Manoir, Ph.D
Yi Ning, Ph.D

Evelin Schröck, M.D.

B. Michael Ghadimi, M.D.

Eva Hilgenfeld, M.D.

Director, Cytogenetic Core,
National Human Genome Research Institute, NIH
Senior Scientist, Aurora Biosciences, La Jolla, CA
Assistant Professor, Department of Pathology,
University of Nijmegen, The Netherlands
Assistant Professor, INSERM, Strasbourg, France
Director, Cytogenetics Laboratory, George
Washington University, Washington, DC
Director, Institute of Human Genetics,
University of Dresden, Germany
Attending Surgeon, University Hospital Göttingen,
Germany
Attending, University Clinic, Frankfurt, Germany

AWARDS TO FELLOWS

Kerstin Heselmeyer, Ph.D.	Federal Technology Transfer Award, 2001
Michael Difilippantonio, Ph.D.	Exceptional Pay Increase, 2002
Cristina Montagna, Ph.D.	Exceptional Pay Increase, 2003
Madhvi Upender, Ph.D.	Fellows Award for Research Excellent, 2003

INVITED PRESENTATIONS (1998-2004)

National:

- Institute of Human Genetics, Minneapolis, MN, January 29, 1998
- FISH Symposium, Steamboat Springs, CO, February 11-13, 1998
- University of Florida, Gainesville, FL, February 25, 1998
- Genetics Task Force, New York, NY, March 17, 1998
- Georgetown University Medical Center, Washington, DC, April 20, 1998
- 8th Annual Meeting of the Society of Biomedical Research, Rockville, MD, June 1, 1998
- MMHCC Bio/Technology, Arlington, VA, June 22, 1998
- Gordon Research Conference on Molecular Cytogenetics, Hanover, NH, July 19-24, 1998
- Eastern Analytical Symposium (Ploem Lecture), NJ, November 16-17, 1998
- The University of Texas Southwestern Medical Center, Dallas, TX, December 14, 1998
- AACR Annual Meeting, Genomics, Genetics, and New Approaches to Cancer Symposium, Philadelphia, PA, April 11-14, 1999
- University of Pittsburgh, Pittsburgh, PA, June 15, 1999
- Association of Genetic Technologists, Orlando, FL, June 17-20, 1999
- Molecular Cytogenetics and Spectral Karyotyping Workshop, Cleveland, OH, September 16-17, 1999
- Montefiore Medical Center, Bronx, NY, September 23, 1999
- Max-Planck-Institute for Biochemistry, Martinsried, Germany, October 22, 1999
- Mouse Models of Human Cancers Consortium, Monterey, CA, January 19-21, 2000
- Eight International Workshop on Chromosomes in Solid Tumors, Tuscon, AZ, January 30-February 2, 2000
- Genetics of Cancer, Johns Hopkins University, Baltimore, MD, March 2, 2000
- Cancer Chromosome Aberrations Database Workshops, Bethesda, MD, March 6, 2000
- DCS Seminars in Clinical and Molecular Oncology, National Cancer Institute, Bethesda, MD, April 11, 2000
- Advanced in situ Hybridization and Immunocytochemistry, Cold Spring Harbor, NY, October 30, 2001
- Winthrop University Hospital, Long Island, New York, October 31, 2000

- National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, February 14, 2001
- American Society for Biochemistry and Molecular Biology, Orlando, FL, April 15, 2001
- Director's Seminar Series Lecture, National Institutes of Health, Bethesda, MD, April 27, 2001
- Aspen Cancer Conference, Aspen, CO, July 14-18, 2001
- Amgen Award Presentation, Los Angeles, CA, August 30-31, 2001
- Advances in Nanostructural Genomics, Bar Harbor, ME, October 9-14, 2001
- Advanced in situ Hybridization and Immunocytochemistry, Cold Spring Harbor, NY, October 26-27, 2001
- Laboratory of Molecular Immunology, National Heart Lung & Blood Institute, Bethesda, MD, October 30, 2001
- Mouse Models of Human Cancer Consortium, National Cancer Institute, Bethesda, MD, November 14, 2001
- University of Connecticut Health Center, Farmington, CT, January 16, 2002
- NCI MMHCC Breast Spore Meeting, Santa Fe, NM, February 13-16, 2002
- Laboratory of Experimental Carcinogenesis, National Cancer Institute, Bethesda, MD, May 10, 2002
- Cancer Prevention Steering Committee Retreat, Gaithersburg, MD, July 17, 2002
- New Trends in Molecular Cytogenetics, Cancer Genetics, Inc., Milford, MA, August 29, 2002
- Workshop on Vaccine Development in Breast Cancer, National Institute of Health, Bethesda, MD, September 30, 2002
- Advances in Nanostructural Genomics II, The Jackson Laboratory, Bar Harbor, ME, October 3-6, 2002
- Advanced in situ Hybridization and Immunocytochemistry, Cold Spring Harbor, NY, October 25, 2002
- American Society of Hematology, Philadelphia, PA, December 6-10, 2002
- Genomic & Proteomic Technological Advances in Cancer, Bethesda, MD, February 10-12, 2003
- Grand Rounds, National Cancer Institute, Bethesda, MD, March 25, 2003
- Genetics, Genomics, and Proteomics Faculty Workshop, National Institutes of Health, Bethesda, MD, May 27, 2003
- Hematologic Malignancies Translational Research, University of Pennsylvania, Philadelphia, PA, June 23, 2003
- MMHCC steering committee, New York, NY, July 9-11, 2003
- Genomics Short Course, National Institutes of Health, Bethesda, MD, August 14, 2003
- NIH Research Festival, National Institute of Health, Bethesda, MD, October 15, 2003
- Advanced in situ Hybridization and Immunocytochemistry, Cold Spring Harbor, NY, October 24, 2003
- Mouse Model of Breast Cancer Consortium, Gaithersburg, MD, December 8, 2003

- Aneuploidy and Cancer: Clinical and experimental aspects, Oakland, California, January 23 – 26, 2004
- Joint Workshop on Emerging Concepts on Metastasis and Metastatic Dormancy, Bethesda, Maryland, February 5, 2004
- Advances in Cancer Research, Reston, Virginia, February 11 – 13, 2004
- University of Rochester Seminar Series in Molecular Medicine, Rochester, NY May 20, 2004
- 9th International Workshop on Multiple Endocrine Neoplasias, Bethesda, MD, June 20-22, 2004
- Genetically modified mice in medicine and pathology, Ithaca, NY, November 16-17, 2004
- Special Topics in Genetics, College Station, TX, March 3-4, 2005

International:

- Leukemia Research Fund, Royal Academy of Physicians, London, UK, March 31-April 3, 1998
- European Society of Human Genetics, Lisbon, Portugal, May 10-13, 1998
- Nordic Symposium of Fluorescence in situ Hybridization, Aarhus, Denmark, August 20-22, 1998
- International Meeting on B-cell Neoplasia, Basel Institute of Immunology, Basel, Switzerland, October 2-5, 1998
- Chromosome and Gene Alterations in Cancer, Helsinki, Finland, November 30-December 2, 1998
- Society for Experimental Cancer Research (AEK), Heidelberg, Germany, March 23-24, 1999
- Second European Cytogenetic Conference, Vienna, Austria, July 3-6, 1999
- XV Asia Pacific Cancer Conference, Chennai, India, December 12-15, 1999
- Advanced Optical Imaging For Modern Medicine & Biology II, Berlin, Germany, June 14-18, 2000
- FISH in Cancer Research, Gothenburg, Sweden, September 21-22, 2000
- 3rd World Congress of Cellular & Molecular Biology, Jena, Germany, October 8-13, 2000
- European Society of Analytical and Cellular Pathology, Caen, France, April 16-19, 2001
- 5th Joint Conference of the American Association for Cancer Research and the Japanese Cancer Association, Tokyo, Japan, March 8-9, 2001
- National Genome Research Network, Bonn, Germany, March 14-15, 2001
- Karolinska Institute, Stockholm, Sweden, June 6-7, 2001
- Ludwig-Maximilian-University, Munich, Germany, November 10, 2001
- University of Regensburg, Germany, November 22, 2001
- National Genome Research Network, Frankfurt, Germany, June 4-5, 2002
- XXIVth International Congress of Pathology, Amsterdam, The Netherlands, October 5-10, 2002
- Molecular Portraits of Tumors, Perigueux, France, November 12-16, 2002

- Mechanisms and Consequences of Chromosomal Aberrations in Cancer Cells, Karolinska Institute, Stockholm, Sweden, November 16-19, 2002
- National Genome Research Network, Frankfurt, Germany, November 19-25, 2002
- European Workshop on Animal Models, Paris, France, March 30-April 1, 2003
- Spanish National Cancer Center, Madrid, Spain, June 27-July 1, 2003
- National Genome Research Network, Bonn, Germany, August 24-26, 2003
- International Conference on Applied Genomics, Amsterdam, The Netherlands, October 1-4, 2003
- National Genome Research Network, Bonn, Germany, March 16 – 24, 2004
- Grand Rounds, Norwegian Radiumhospitalet, Oslo, Norway, May 24-26, 2004
- Molecular Medicine, Kiel, Germany, June 16-19, 2004
- Seventh International Conference of Anticancer Research, Corfu, Greece, October 25-30, 2004.\
- Septin Workshop, Aarhus, Denmark, May 26 – June 1, 2005
- XXII, Symposium of the IACRLRD, June, 30 – July 6, 2005
- Conferencia Magistral, July 4-6, 2005.

TEACHING/COURSES

Instructor, Cold Spring Harbor Laboratory Course on “Advanced in situ Hybridization and Immunocytochemistry”, Cold Spring Harbor, New York.

Oct. 18-31, 1994
 Oct. 12-25, 1995
 Oct. 10-23, 1996
 Oct. 14-27, 1997
 Oct. 14-27, 1998
 Oct. 19-26, 1999
 Oct. 18-31, 2000

Organizer, Cold Spring Harbor Laboratory Course on “Advanced Molecular Cytogenetics”, Cold Spring Harbor, New York.

March 4-10, 1998
 March 9-15, 1999